Buckeye REC

Your Touchstone Energy® Cooperative

DATE: March 7, 2014

FROM: Buckeye Rural Electric Cooperative
4848 St Rt 325
Rio Grande OH

TO: Federal Communications Commission (FCC) Staff

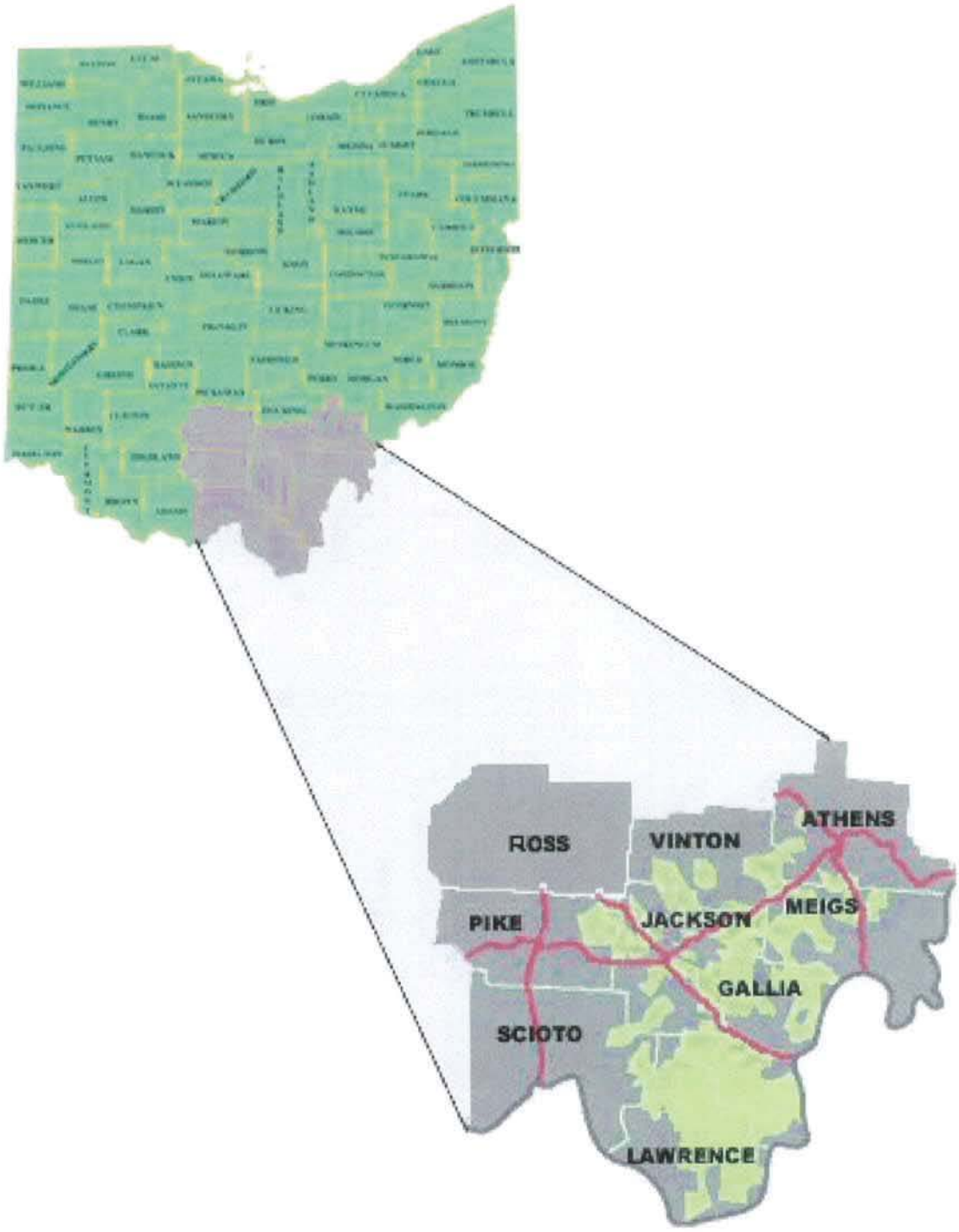
SUBJECT: Expression of Interest – Rural Trials
WC Docket 10-90

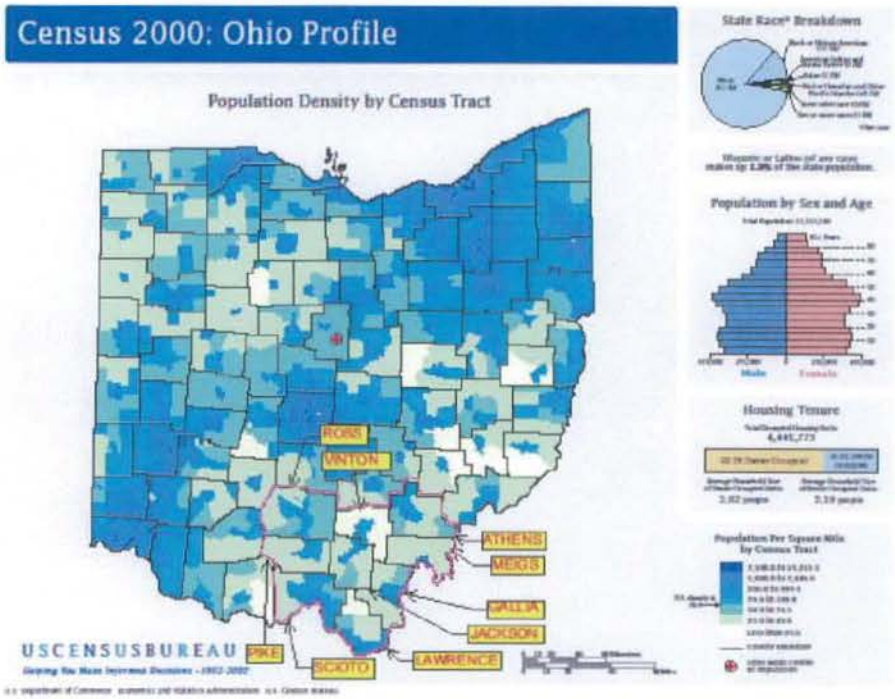
Background

Buckeye Rural Electric Cooperative is located in the Appalachian region in southeastern Ohio along the Ohio River and serves over 18,821 members in parts of the nine counties of Athens, Gallia, Jackson, Lawrence, Meigs, Pike, Ross, Scioto, and Vinton. BREC was incorporated in 1938 under the Rural Electrification act and has been serving their members continuously since then. The co-op averages slightly more than 7 customers per mile of line along a current distribution system totaling 2,609 miles of primary and secondary lines serving BREC's 98% residential members in a very rural area of Appalachian Ohio. There is a tremendous need for improved broadband service for well over half of our customers. BREC previously offered dial-up internet services until such time that dial-up service was no longer a viable option.

Geographic Territory – The following pages identify the 1500+ square mile BREC service area in Appalachian Ohio, the most recent Census profile map and the Census Tracts which touch the BREC service area. Within the 57 impacted Census Tracts, there are 13,210 locations available for funding, with 10,823 of those locations falling within the BREC service area and 9,938 of those locations representing BREC customers who would be directly eligible for funding.

Buckeye Rural Electric Cooperative Service Area





State	County	County Name	TractID	Eligible High Cost Locations	Extremely High Cost Locations
OH	39009	Athens	39009972600	145	3
OH	39009	Athens	39009972700	134	3
OH	39009	Athens	39009972800	177	1
OH	39009	Athens	39009972900	5	0
OH	39009	Athens	39009973300	6	0
OH	39009	Athens	39009973400	24	2
OH	39009	Athens	39009973500	401	9
OH	39009	Athens	39009973600	95	5
OH	39009	Athens	39009973700	260	8
OH	39009	Athens	39009973800	83	7
OH	39053	Gallia	39053953500	604	16
OH	39053	Gallia	39053953600	1096	37
OH	39053	Gallia	39053953700	1126	85
OH	39053	Gallia	39053953800	1202	21
OH	39053	Gallia	39053953900	537	10
OH	39053	Gallia	39053954000	13	0
OH	39053	Gallia	39053954100	3	0
OH	39079	Jackson	39079957200	13	3

OH	39079	Jackson	39079957400	88	1
OH	39079	Jackson	39079957700	251	12
OH	39079	Jackson	39079957800	255	8
OH	39087	Lawrence	39087050200	1	0
OH	39087	Lawrence	39087050500	909	43
OH	39087	Lawrence	39087050600	514	54
OH	39087	Lawrence	39087050700	171	12
OH	39087	Lawrence	39087050800	1	0
OH	39087	Lawrence	39087051002	54	0
OH	39087	Lawrence	39087051100	35	0
OH	39087	Lawrence	39087051200	1	0
OH	39087	Lawrence	39087051300	4	0
OH	39087	Lawrence	39087051402	258	3
OH	39105	Meigs	39105964100	263	20
OH	39105	Meigs	39105964200	134	2
OH	39105	Meigs	39105964300	632	45
OH	39105	Meigs	39105964500	26	0
OH	39105	Meigs	39105964600	499	13
OH	39131	Pike	39131952200	172	16
OH	39131	Pike	39131952300	60	5
OH	39131	Pike	39131952400	4	0
OH	39131	Pike	39131952500	2	0
OH	39131	Pike	39131952600	480	12
OH	39131	Pike	39131952700	313	20
OH	39141	Ross	39141955603	62	8
OH	39141	Ross	39141955700	425	11
OH	39141	Ross	39141956700	2	0
OH	39145	Scioto	39145002100	8	0
OH	39145	Scioto	39145002200	23	0
OH	39145	Scioto	39145002300	102	9
OH	39145	Scioto	39145002600	113	5
OH	39145	Scioto	39145002700	262	7
OH	39145	Scioto	39145002800	49	8
OH	39145	Scioto	39145002900	4	0
OH	39145	Scioto	39145004000	200	29
OH	39163	Vinton	39163953000	516	41
OH	39163	Vinton	39163953100	58	0
OH	39163	Vinton	39163953200	335	66
			Total	13210	660

List of Anchor Institutions

There are very few business and enterprise level anchor institutions which are not already being served by Price CAP or BTOP recipients.

Proposed technology

The proposed technology for the network would be Fiber to the Home design with an underlying foundation built on a fully protected 323 mile, 20 node ring in a hybrid GPON / Active Ethernet distribution configuration. Calix is the identified vendor, utilizing their highly scalable E7-2 platform, and has established a very successful record of RUS, BTOP and other federally funded FTTH deployments across the United States. Projected service offerings would start at 10 Mbps with the capability to scale up to 100 mbps for residential and Small/Medium sized businesses and up to 1 Gbps+ for enterprise customers. Proposed basic service packages would be 10 mbps down/5 mbps up for $40, 10d/10u for $50, 20d/20u for $60 with incremental increases of 10 mbps offered for $10 up to 50 mbps at $90.

State and/or Local or Tribal Government Participation in and/or Support for Project

There is no current Federal, State or Local funding being provided or being applied for which would be used in conjunction with this project. There are no Tribal lands within the BREC service boundaries.

Existing Providers

The approximately 90% of BREC's service territory is currently served by AT&T and Frontier North with the remaining area being served by Armstrong Cable, Minford Telephone, Horizon Telcom, Windstream Western Reserve, Time Warner, JB Nets, New Era Broadband, Intelliwave and Suddenlink. The rural nature or our customer locations has made it challenging for the wireline companies to provide more than just the very basic DSL level of service outside the immediate areas of their backbone routes and as a result, high quality residential and small business is very limited in these rural areas. BREC is willing to consider relationships with existing BTOP recipients, wireless providers and ETC's for wholesale access to dark fiber, Internet and voice products in order to provide the most cost effective deployment and ongoing operations.

Project Timeline

The network fiber would be constructed and installed on existing BREC Right of Ways and unless the use of FCC funding would mandate the execution of a full network Environmental Assessment, BREC would be positioned to begin construction immediately if grant funding were to be awarded. Estimated timeline for full deployment and network turn-up with service to anchor clients would be eighteen (18) months.

Scalability

The initial design would be based on a deployment of a protected core backbone which would provide connectivity to subscribers along routes between substations and along primary electric distribution routes with the capability to extend fiber to potential customers along those routes as funding becomes available or as the business model supports. The core backbone would also establish a foundation to deploy future smart grid applications for controlling peak load demand and reducing wholesale and consumer electric costs.

Total Utility Investment

BREC's contribution toward this project would be approximately $4,100,000, pending final approval of BREC's Board of Directors.

One Time Capital Infrastructure Investment Needed

BREC would be asking for an additional $9,500,000 for completion of Phase 1 of the project.

Total Project Cost

Total Phase 1 project cost would be $13,600,000. This would allow BREC to build a fully protected core backbone of approximately 323 miles through the most rural areas of our network ensuring adequate network deployment to penetrate and fund initial connections to 10%+ of our member base.

Respectfully,

C. Tonda Meadows

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Executive Vice President & General Manager